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John P. Moyna

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CATERPILLAR/FINNEGAN, HENDERSON, L.L.P.

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EXAMINER

MCGOWAN, JAMIE LOUISE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/918,401	Applicant(s) MOYNA, JOHN P.	
	Examiner JAMIE L. MCGOWAN	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9 and 41-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-9, 41-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 50 and 51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 50 discloses that a pillar is movably mounted within each hollow vertical column. The specification only appears to provide support for a column within a pillar, not a pillar within a column. Claim 50 is examined in this office action as if lines 6-9 should have read :

-- a plurality of hollow vertical pillars laterally spaced and fixed on the frame;
a column movably mounted within each hollow vertical pillar, each column
connected at a lower end to an axle including spaced ground engaging wheels;--

further, to be consistent, claim 51 should read:

-- wherein the plurality of hollow vertical pillars includes tow hollow vertical pillars,
and wherein the apparatus further includes a transverse bar connecting the two
hollow vertical pillars adjacent upper portions thereof--

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1, 2, 4, 7, 8, 42, 43, 44, 46, 47, 48, 50, 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landry (5,996,704) in view of Hayse (2,905,254).

Regarding claims 1, 46 and 50, Landry disclose an apparatus capable of separating soil, the apparatus comprising:

- A frame (12)
- An axle (42)
- Two laterally spaced pillars (34) connected to the frame and a column (38) inside each pillar and extending to the axle (42)
- A piston and cylinder assembly including a cylinder connected to the transverse bar (40) and a movable piston rod connected to the axle via elements 14 and 38
- Discs attached to the frame on opposite sides of the axle (Figure 5), wherein the discs are located between the frame and the soil and further wherein the discs rotate upon contact with the soil
- A controller associated with the piston and cylinder and configured to control movement of the frame via the piston and cylinder assembly to move³ the discs with the frame and to move the frame and the discs with respect to the axle

While Landry discloses the invention as described above, it fails to disclose that the transverse bar connects the pillars instead of the columns and that the hydraulic cylinder is directly attached between the axle and the transverse bar. By simply rearranging the parts of the invention to place the transverse bar between the pillars and connecting the hydraulic cylinder to the axle instead of the pillar, the lifting mechanism would still operate in the same way, i.e. it would move the frame by connecting the hydraulic cylinder between a stationary part and a movable part. (In re Kuhle, 526 F.2d 553, 188 USPQ7 (CCPA 1975)). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to rearrange the parts of Landry to connect the hydraulic cylinder to the axle and the

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transverse bar connected to the pillars to provide an identical lifting movement in a different way.

While Landry discloses the invention as described above, it fails to disclose that the discs on one end could be non-parallel with discs on the other end of the frame. Like Landry, Hayse also discloses a cultivating implement with a lifting mechanism. Unlike Landry, Hayse further discloses that the discs can be angled with respect to one another. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include discs in a non parallel formation with respect to one another as taught by Hayse in the invention of Landry as an alternate configuration that would work equally well to cultivate the soil (KSR International Co. v. Teleflex Inc., 550 USPQ2d 1385 (2007)).

Regarding claims 2 and 47, while Landry discloses the invention above, it fails to disclose a hitch assembly with a hydraulic cylinder connected between the hitch assembly and the frame configured to pivot the frame about the axle. Like Landry, Hayse also discloses a soil cultivating machine. Unlike Landry, Hayse further discloses a lifting mechanism with a hydraulic cylinder configured to tilt the frame about the axle. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the hitch assembly of Hayse in the device of Landry to provide the operator with more control over the lifting and movement of the frame.

Regarding claims 4 and 48, the combination of Landry and Hayse discloses a liner (36) attached to the pillar and located between the column and the pillar.

Regarding claim 7, the combination discloses that the connector is configured to rotate in first and second opposite directions.

Regarding claim 8, the combination discloses at least one wheel connected to the axle and configured to support the frame.

Regarding claim 42, the combination discloses two pillars connected to the frame, and a column inside each pillar and extending to the axle.

Regarding claims 43 and 51, the combination discloses a bar (40) extending between the two pillars, and wherein the cylinder of the piston and cylinder assembly is connected to the bar.

Regarding claim 44, the combination discloses that the controller would control both hydraulic cylinders.

Regarding claim 52, the combination disclose that the piston and cylinder assembly includes a cylinder connected to the transverse bar and a piston rod connected to the axle.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landry (5,996,704) in view of Hayse (2,905,254) as applied to claim 8 above, and further in view of Kinzenbaw et al. (5,346,019).

While the combination of Landry and Hayse discloses the invention as described above, it fails to disclose plates located within the pillar configured to retain the liner. Like the combination, Kinzenbaw et al. also discloses a lifting mechanism comprising a pillar, a column and a liner. Unlike the combination, Kinzenbaw et al. further discloses plates (182b) that allow for the adjustment and retention of the liner. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the plates of Kinzenbaw et al. in the device of the combination to effectively retain and adjust the liner move efficiently.

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4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landry (5,996,704) in view of Hayse (2,905,254) as applied to claim 8 above, and further in view of Fruth (3,331,638).

While the combination of Landry and Hayse discloses the device above, it fails to disclose a plug in the wheel of the frame. Like the combination of Landry and Hayse, Fruth also discloses a wheel. Unlike the combination, Fruth further discloses a plug in the wheel for an oil bath to keep the wheel and bearings lubricated. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an oil bath and plug in the wheel of the combination as taught by Fruth to keep the bearings and the wheel well lubricated to prevent damage to any of the parts.

5. Claims 41, 49 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landry (5,996,704) in view of Hayse (2,905,254) as applied to claim 8 above, and further in view of Barton (5,596,907).

The combination of Landry and Hayse disclose the claimed invention except for specifically disclosing that the liner could be plastic. Like the combination, Barton also discloses a liner between two relatively sliding parts. Unlike the combination, Barton further discloses that the liner could be plastic. Barton teaches that having a plastic liner between the two metal parts produces less friction than would a liner made of metal causing easier, more efficient sliding. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the liner of the combination out of plastic as taught by Barton to provide an efficient, smooth sliding device.

6. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landry (5,996,704) in view of Hayse (2,905,254) as applied to claim 2 above, and further in view of Pearson (4,723,608)

While the combination of Landry and Hayse discloses the device as described above, it fails to specifically disclose that the hitch cylinder automatically adjusts to changes in the contour of the ground. Like the combination, Pearson also discloses a hitch cylinder for a towed implement. Unlike the combination, Pearson further discloses a cylinder that connects the frame and the hitch that automatically adjusts to changes in the ground contour. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the hitch cylinder of the combination of Landry and Hayse adjust automatically to the ground contour as taught by Pearson to ensure even working of the field with the discs.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 2, 4-9, and 41-53 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE L. MCGOWAN whose telephone number is (571)272-5064. The examiner can normally be reached on Monday through Friday 8:00 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on (571)272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas B Will/
Supervisory Patent Examiner
Art Unit 3671

JLM
December 5, 2008